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ABSTRACT

This discussion of the role of the information professional in the utilization of information by all categories of users begins by suggesting answers to two questions: What is information? and Who are the users and their characteristics? Against this background, analyses are made of the intermediary role of the information professional who serves to link the user and the contents of documents--both those that are under his control and those that are not--and how he should be trained in order to obtain the basic knowledge and skills needed to perform his duties effectively. An outline of a curriculum designed to produce an information professional who will play a leading role in creating this link between the user and his information needs is also provided. (9 references) (CGD)

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THE INTERMEDIARY ROLE OF THE PROFESSIONAL

BY

JAMES MWANGI NG'ANG'A

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INFORMATION AND USERS: HOW TO BRING THEM TOGETHER -
THE INTERMEDIARY ROLE OF THE PROFESSIONAL

BY

JAMES MWANGI NG'ANG'A

INTRODUCTION

My task in this paper is to show the role the information professional plays in the utilization of information by all categories of users. I shall attempt to answer the questions, what is information? Who are the users and their characteristics? And against this background look at the intermediary role of the information professional and how he should be trained in order to perform his duties effectively so that the user may be able to get the right information, in the right place, at the right time.

What are the information sciences? They are the professions which are commonly taken to mean archive, librarianship, documentation and information science. It is now accepted that they should also include technical authors, illustrators, film producers, system analysts and all those concerned with the transmission of knowledge. A major function of information scientists is to ensure effective communication of recorded information. For the purposes of this paper, we shall concentrate on the information professionals in the fields of archivists, librarians and information scientists.

INFORMATION

The main commodity of information scientists is Information.

Information has now been recognized as an important national resource which needs to be planned and harnessed for use like all other national resources such as energy, oils, agriculture etc. The 1974 UNESCO Intergovernmental Conference on the National Information Systems (NATIS) emphasised this concept namely "Information is an essential part of a nation's resources and access to it is one of the basic human rights". It also emphasised the importance of information in scientific and economic progress as well as social communication.

This concept was seen as integral to the New International Economic and Social Order as defined at the Sixth Special Session of the U.N. General Assembly where it was stated that "access to information must be a major feature in the improvement of the quality of life for each individual as much as he needs to have available he should have".¹

It is important to remember that this important resource needs to be harnessed if it is going to be used effectively. Russell Bourden² reminds us that like all other resources we are concerned with, it can be wasted. "As water runs off the hills and into the rivers and away into the sea without it being harnessed, so information too can be wasted. It too can flow away into a river of books and periodicals in the sea of shelves and an ocean of stock there remain unused".

What is information? Various definitions have been advanced. It is however noted that it is an ambiguous concept in that many

meanings have been proposed depending on the proponent disciplines of interest.³ For our purposes, information is seen as facts, opinions and data of value to decision making. It is not necessarily limited to what is revealed in the results of study research and scholarship in all fields of knowledge. Let us however remind ourselves that information is not necessarily knowledge. But as Saunders⁴ notes, "Information provides essential raw material, which in due course can lead to new knowledge, if only via the restructuring of existing knowledge". Information is an essential commodity for informed decision-making at all levels. Use of information is necessary in solving any problems. Thus as we can see there is a lot of information which is generated every day. Most of it is however transmitted orally but a vast amount of it is recorded in various forms such as books, periodicals, audio-visuals. These records consist of the sum total of man's endeavours, experience and thought. This vast store of knowledge contains information which can be used to solve man's problems if only we can learn how to utilize it effectively.

Since man started recording his thoughts the growth of information has grown exponentially though it is more so in science and technology. In his paper, Information, the Unscarce Resource, Saunders⁵ illustrates this growth graphically as follows -

"As a tiny indicator of what it might be, it is worth noting that in the case of the U.S.A. alone... there existed in the mid-seventies 32,000 public, academic and special libraries, plus a

further 75,000 school libraries; and that between them they owned a staggering 1,300 million volumes organised and deployed for use". He further noted that about 600,000 new book titles were published annually in addition to about 8000 daily newspapers published all over the world. In the scientific field he noted that the biomedical literature exceeded 4 million articles a year and that the Chemical Abstracts were expected to reach a million a year by 1986. The paper also indicates the amount of records which was stored on electronic bibliographic files as well as the rising rate of annual growth. The existing mass of literature and the continuing exponential growth creates a situation difficult to handle but also to access to the contents of that literature. The use of modern technology, professional skills and effective management has to be marshalled in order that the user can be assisted to get the right information at the right time. This leads me to the question of education for information science professionals. How do we educate a professional who will be able to link the users with the right information? Bernard Franckowiak⁵, in his paper "Essential program requirements for the 1980s and 1990s" says, that we should go back to our reason for existence in order to be able to discuss this question. "It is important to understand that the Librarian or information professional functions essentially as an information intermediary between the needs and desires of a user population and the larger world of information that exists in countless locations in a growing proliferation of formats. It is important to understand that what the user is concerned with is the intellectual content of the information itself

and not necessarily the packaging or the technology required to deliver that information to the users".

THE USERS, THEIR NEEDS AND CHARACTERISTICS

Who are the users and what are their needs? In order to maximise the impact of the library service, the information professional should know something about his clients. Every library has a unique user population. The characteristics of the user population influences stock selection, the kind of service to be given and the methods to be used in dissemination.

Potential users of our information systems range from students whose basic needs are textbooks to high level researchers, and policy makers. Users especially in developing countries will also include a high percentage of people who cannot read. In some areas especially rural areas they could number anything up to 70% of the population. This group will be unable to use print-based information as Kingo⁶ notes they will also be unable to comprehend methods of thinking and problem solving which accompany the use of print-based information such as use of a variety of sources, and analytical approach to problems.

THE INFORMATION SCIENCE PROFESSIONAL

The fundamental aims of the library profession are

- i) to acquire, organise and preserve recorded knowledge and
- ii) to provide ready access to it for interested users.

Few users can make effective use of the mass of undigested data. Indeed what they need is specific and relevant information in an appropriate format.

In his capacity as intermediary, the professional's major rôle is to link the user and the contents of the documents both under his control or outside it. He does this by selecting, analysing, storing and disseminating information in a such manner that enhances and makes it easy - the very process that the authors of documents started. For effective retrieval purposes, the professional develops retrieval devices such as catalogues, abstracts, indexes, data bases, bibliographies etc.

Of these functions, selection is the most important. For through the selection process, "we take the first crucial step towards making manageable and accessible the vast quantities of information which are being remorselessly added to an existing stock pile of almost unimaginable magnitude".⁶

Selection as we noted earlier is geared towards meeting user's needs. In order to satisfy such needs, those doing selection need to understand their users and their information needs which could be done through user studies or market research.

After the material have been selected and acquired, they require to be organised and stored in such manner that they can

be effectively used. This involves such activities as cataloguing, classification, indexing and abstracting, as well as the production of other necessary retrieval devices thereby leading to dissemination activity.

As we noted above, most users are not able to make effective use of the mass of information. Consequently, provision of information remains as a major role of the professional. He uses his skills in search for information, assists in retrieval, advises on best way to find the required information and where necessary attempts some evaluation of the required information. Indeed the exponential growth of information has seen an increase of positions of information officers not only in special libraries but also in public and academic libraries. The information officers combine information skills and specialist subject knowledge. Thus the professional, as Katz observes, "is an activist in the scholarly, scientific process of gathering and developing various channels of information". It must be emphasised that subject knowledge will be necessary if the professional is to play his intermediary role effectively.

Suffice it to add that the professional must possess understanding of the purposes and activities of librarianship. He should therefore be an expert in one or more areas of bibliography, and be capable of supervising one or more functions of a library. For this to be achieved, the curriculum of the training

institutions must correspond to the knowledge and skills required of the professional.

To perform these functions requires that those who are responsible for selection, organisation and dissemination of information should possess certain basic skills and knowledge. We shall now look briefly at the skills which an information professional should possess and how he should be trained to acquire them.

Among other things a professional should be able to demonstrate some of the following basic skills -

- a) management skills.
- b) ability to relate to, assess the needs of, and communicate with users,
- c) ability to perceive objectives and priorities.
- d) awareness of the library's market.
- e) ability to create a demand for services.
- f) ability to provide specialized services.
- g) should be able to help in the exploitation, utilization of new technology to enhance traditional current awareness services.
- h) should be able to analyse and synthesize data to provide support for management information systems.
- i) should have skills in budgetting and marketing techniques, system analysis, decision theory, statistical analysis and above all ability to communicate ideas both verbally and written.

- j) ability to teach users.
- k) ability to edit, assess and appropriately package for the user what he needs.
- l) knowledge of how information is generated and recorded.
- m) ability to demonstrate the basic information technology literacy.
- n) Political skills.

Suffice to add that in his capacity as an intermediary, the professional is an active performer in the information communication process. He should therefore have an appreciation for not only the varieties of information, but how total information sources may be processed and retrieved for individual users. He should also have the understanding and appreciation for total service.⁷ For service as we are all aware is the heart beat of information work. As mediator, the professional is an important part of the communication system and he assists users in the transmission of the messages by clarifying what type of communication or message is needed by searching the various methods of transmission. It is therefore necessary that the information science professional should be knowledgeable about the channels of communication through which knowledge is generated and communicated, as he is also by nature of his job, a communicator.

Information providers should be skilled in communication skills such as reading, writing of reports speaking, listening which are essential in organisational effectiveness. Indeed the

need to acquire such skills is not only essential for professional staff but it is also necessary for paraprofessionals who should acquire such skills as telephone answering and other skills involving the use of mechanical or electronic equipment. As staff gain experience and move into more senior positions, they are likely to be involved in staff selection and recruitment which involve more complex skills such interviewing techniques, preparation of clear and concise performance goals and objectives, report writing etc.

Basic organisational skills should be taught and learned in the educational process. It is however expected that although communication skills will be formally taught in library schools the professionals are expected to know that learning is a continuous process from formal training institutions to working areas. A lot of formal learning has to be adapted and the informal adopted. A good professional may be measured by his ability to integrate formal learning and working experience both for the good of the profession and betterment of his job.

It is now accepted that although we develop catalogue, bibliographies, indexes and abstracts as access tools to documents, they are also so technical on their own right that they impede on the very access which they were expected to assist. Hence the need to familiarise the users on how to use these tools - a skill the professionals to be should be taught. It is therefore important

that we should no longer take for granted that every professional can impart on this skill. It should be included in the curriculum and be effectively covered.

CURRICULUM

The purpose of curriculum is to produce a professional workforce able to understand and satisfy the information needs of particular populations or communities of users. In order to equip information professionals with the relevant skills and abilities, there is need to design a curriculum which will allow acquisition of basic skills and the necessary specializations. The curriculum should be user oriented and should seek to develop and integrate conceptual frame of reference upon what specific skills and knowledge can be taught. The curriculum should as far as possible integrate environmental courses that makes the library information science programme relevant. For instance a curriculum designed for people who wish to work in school libraries should include a study of Learning theory and child development. This could either be offered within the school of Library and Information Science or arrangements can be made for students to take the courses in other departments.

The curriculum we produce should be determined by the needs of the society; both present and the future. Bearing in mind the three professions, namely archivists, librarians and the information scientists, and the need to harmonise the supply of information, the curriculum should be designed in such a way that

professionals we produce will have a basic understanding of the total information system while at the same time he will be a specialist in one of them. Such a curriculum should stem from a common core, supported by elective or specialized courses.

At this stage let us identify areas of common ground between the archivists on one hand and librarians and information scientists on the other. Considering the characteristics of the material each group hold, and the services provided, the following activities are similar i.e. management, abstracting, indexing; application of technology to information handling, storage and dissemination; user education including user studies; research methodology, record management, preservation and conservation of documents, communication skills, information retrieval and information sources.

The common core is defined as those learning experiences which every member of the profession regardless of his speciality must have gone through in order to function as an effective professional. In this connection, the three areas which form the core are

- i) Organization of knowledge and retrieval skills,
- ii) Knowledge of sources and their guides,
- iii) Management.

The curriculum should prepare students for the professional problems they will face after graduation as well as for those which

they may face years ahead. This calls for the design of a flexible curriculum. Above all the curriculum should enable the student to understand information flow in society including users and user needs, the economics of information, the information industry, and the role of the professionals in the information transfer process. This can perhaps be achieved by laying greater emphasis on such development of courses such as research methodology, information in society; introducing such courses as Information systems analysis, information systems planning; marketing of information as well as courses dealing with application of technology in data handling.

The essentials of a basic course could be grouped under the following:-

1. Philosophy - place of librarianship and information work in the scheme of things, the aims and purposes of different types; the development of national networks and the increasing importance of information in a complex society.
2. Clientele - their nature, needs and demands. Methods of meeting these - staff inter-face with users.
3. Tools of the trade - Library or archival materials, their organization, exploitation and preservation.

Other courses should include

Management,

Application of information technology, and

Research methodology.

Essentially, the basic curriculum for a first professional course should cover the basic aspects of information handling from its generation to its use.

Education of users must also be given a high priority. Courses should include user education, marketing, user studies, promotion, dissemination and diffusion, repackaging of information and direct user contact with follow-ups.

Newer areas of information technology and services which can prepare graduates for information related careers such as those listed below should be included.

Media management

Book publishing and production

Records Management

Software development

In developing countries, the curriculum should cater the information needs of rural communities teaching students how to transfer and communicate with a user community that is illiterate.

Practical training should form an integral part of information science education.

In designing the curriculum it is necessary also to think about course objectives, teaching methods and methods of evaluating the teaching.

The objectives should be derived from user needs and institutional needs for professional staff. Peter Jordan⁹ has identified the following -

"to produce students who have

- 1) a knowledge of the main sources of information whatever the format.
- 2) the skill to use the sources to discover information in the most cost-effective way.
- 3) the ability record and store information for effective retrieval.
- 4) the communication skills to analyse the needs of individuals who might make use of information services and provide them with information to meet those needs.
- 5) an awareness of the environmental factors which affect the diffusion of information and have reached a well-informed opinion of their own such as legislation, publishing socio-economic factors, ethical considerations.
- 6) a user-oriented attitude rather than a purely materials-based one.

To achieve these objectives, teaching should be through a variety of methods such lectures, tutorials where groups of students

discuss seminar papers by other students; use of case-studies etc. A subject like management could be taught through general lectures followed by tutorial groups of students with common interests discuss the topics relating them to their needs.

Evaluation should be by continuous assessment, final year examinations assessed by both internal and external moderators. It may be necessary to establish a dialogue between the teachers and practioners where discussion about the courses and their effectiveness are discussed. Such dialogue should give the teachers the feelings of the employers while the employers also have a chance to learn about new research developments. In East,- Central and Southern African Region such a meeting was held in the University of Botswana in August 1986 and proved very useful in exchange of ideas.

CONCLUSION

It has been the aim of this paper to identify the curriculum required to produce an information professional who will play a leading role in linking the user with his information needs. Let us add that the professional we are talking about will in addition, to his service role, be an information manager. In order to play his intermediary role effectively he will need to provide specialized subject knowledge. To help in developing these roles I wish to conclude by saying that to educate and equip the professional with requisite skills and abilities, his education should be provided in institutions of higher learning.

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